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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,130	01/19/2001	Lenny Lipton	300.57	9479

7590

01/10/2003

Richard A. Nebb
Dergosits & Noah LLP
Suite 1150
Four Embarcadero Center
San Francisco, CA 94111

EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 01/10/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/766,130

Applicant(s)

LIPTON ET AL.

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. Applicant should provide the information disclosure statement or related articles.

Drawings

2. Figures 1-7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter "driving" or "driving circuit" which was not described in the specification and figures in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6-9, and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liptoh et al. (U.S. Patent No. 4,792,850).

Regarding claims 1, 6, and 11, referring to Figs. 10 and 11, Liptoh teaches a method for driving a pi-cell modulator in a stereoscopic image viewing system, comprising applying an alternating, unipolar-carrier waveform to the pi-cell (col. 5, lines 28-44, col. 12, lines 33-68).

Liptoh differs from claims 1, 6, and 11 in that he does not specifically teach the carrier waveform does not change polarity within a time period that the pi-cell is energized. However, it would have been obvious to obtain the carrier waveform does not change polarity within a time period that the pi-cell is energized in order to prevent a visible artifact and reduce the appearance of ion migration defects.

Regarding claims 2, 7, and 12, Liptoh further teaches the waveform is in the range of 1-2 kHz (col. 7, lines 34-36).

Regarding claims 3, 8, and 13, it would have been obvious to obtain a stutter start waveform is applied to the pi-cell for a brief period of time when power is first applied in order to provide a force for pushing the cell into going pi more quickly.

7. Claims 5, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liptoh et al. (U.S. Patent No. 4,792,850) in view of Edwards (U.S. Patent No. 6,057,811).

Regarding claim 4, 9, and 14, Liptoh differs from claims 4, 9, and 14 in that he does not specifically teach the start waveform is a series of pulses separated by a small rest period. However, referring to Fig. 4, Edwards discloses a start waveform (50) is a series of pulses separated by a small rest period (col. 5, lines 14-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the start

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waveform is a series of pulses separated by a small rest period in the system of Liptoh in order to allow optimally activate the cell.

Regarding claim 5, 10 and 15, it would have been obvious to obtain the small rest period is approximately a few hundred milliseconds in order to provide enough transition time to relax.

8. The prior art made of record and not relied upon is considered to pertinent applicant's disclosure.

Yamazaki et al. (U.S. Patent No. 6,348,957) teaches display unit.

Lipton (U.S. Patent No. 5,181,133) teaches driving method for TN liquid crystal shutters for stereoscopic and other applications.

Woodgate et al. (U.S. Patent No. 5,917,562) teaches autostereoscopic display and spatial light modulator.

Ferguson (U.S. Patent No. 6,184,969) teaches optical display system and method.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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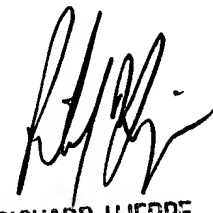
Washington, DC. 20231

Or faxed to: 703-872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is 703-306-0377.

Jennifer T. Nguyen
Patent Examiner
Art Unit 2674



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600